

67,200-523
2001-0271

ABSTRACT OF THE DISCLOSURE

An assist feature for isolated, and semi-dense random contacts, as may be present on a photomask used in photolithographic processes for semiconductor device fabrication, 5 is disclosed. The assist feature can be used in conjunction with off-axis illumination (OAI) for such non-dense contacts, for improving the depth of focus (DOF), resolution, or both of photolithography for such contacts, such that the non-dense contact preferably substantially mimics a dense contact during OAI. A photomask of the invention includes a number of assist features situated near and around the non-dense contact. A method for creating a photomask according to the invention, as well as a method for fabricating a semiconductor device using such a mask, are also disclosed.

TOP SECRET//NOFORN